

What is claimed is:

1. A computer implemented method of deserializing a data transmission, which is coded in one of a plurality of different communication protocols, comprising the steps of:
receiving the data transmission, wherein the data transmission includes a clock portion and a data portion;
identifying the communication protocol the data transmission is encoded in;
providing a plurality of programmable hardware circuits and programmable software modules to provide a plurality of deserializing functions, the hardware circuits providing deserializing functions that are applicable to a first of the communication protocols, the software modules providing deserializing functions that are applied to a second of communication protocols;
determining a first of said programmable hardware circuits and a first of said programmable software modules that are required to deserialize the data transmission according to the determined communication protocol;
programming said first programmable hardware circuit and first programmable software module with parameters required to deserialize the data transmission according to the determined transmission protocol;
utilizing said programmed first plurality of programmable hardware circuit and said programmed first programmable software modules to apply a plurality of deserializing functions to deserialize the data transmission according to the identified transmission protocol, wherein the deserializing functions include:

transmission is being sampled at the correct rate if required by the identified communication protocol;

storing the decoded data in a data storage medium, which includes a variable size data buffer according to the programmed parameters; and

for each of the deserializing functions applied, generating an interrupt and transmitting the interrupt to a CPU.

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